## 102-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	微機電系統概論	Serial No. / ID	2088 / MAI3050
Dept.	機械與自動化工程學系	School System / Class	大學日間部3年1班
Lecturer	鄭江河	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(≡)CDE / H443	Language	Chinese

## Introduction

Microelectromechanical Systems is a fundamental course connecting microfabrication and microsystem design with practical problems. This course will provide students a thorough understanding of the bulk micromachining, surface micromachining, lithography, electroforming, molding, micro electro-discharge machining. The adequate ability to develop the micro manufacture and design model and to analyze the microsystem engineering will be developed.

## Outline

- 1.Introduction to microscopic world
- 2.MEMS application
- 3.Bulk niicromachining
- 4. Surface micromachining
- 5.LIGA
- 6.Non IC-based micromachining
- 7.Bonding techniques
- 8. Detection techniques
- 9. Microactuators and microsensors

## Prerequisite

Mechanical Manufacturing, Mechanics of Materials